

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) An information recording medium on which there are recorded:

content information;

button information for defining a button menu which allows an operation as for said content information; and

play list information for defining reproduction sequence of said content information by a unit of item, which constitutes said content information and which is accessible upon reproduction,

said button information including a plurality of button pages each of which can constitute the button menu and whose display can be changed to each other,

said button information being associated with button image information which is displayed and outputted with a background image,

said play list information including i) item information for specifying each item which constitutes said content information; and ii) sub item information for specifying said button information as a sub item,

the item information including information indicating a

reproduction time of the item,
the sub item information including information
indicating a reproduction time of the sub item.

2. (canceled)

3. (original) The information recording medium according to claim 1, wherein at least one of the plurality of button pages includes button command information for defining the operation.

4. (original) The information recording medium according to claim 1, wherein at least one of the plurality of button pages includes button control information being associated with at least one button image information which is displayed and outputted as the button menu, and for displaying and outputting the button image information.

5. (previously presented) The information recording medium according to claim 4, wherein the button control information includes at least one of association information which indicates association with the button image information, display position information which indicates a display position of a button defined by the button image information, and near-by button information which indicates a change in a state of the button caused by the operation.

6. (previously presented) The information recording medium according to claim 1, wherein said button information is displayed, with it superimposed on or in place of one portion of said content information, or is not displayed at all, selectively in accordance with external designation.

7. (original) The information recording medium according to claim 1, wherein said button information is recorded together with said content information, in a content space in which said content information is recorded and which occupies one area of a recording area.

8. (original) The information recording medium according to claim 1, on which there is further recorded background image information for defining a background image on which the button menu is superimposed and displayed.

9. (currently amended) An information recording apparatus, comprising:

a first recording device for recording content information and button information for defining a button menu which allows an operation as for said content information; and

a second record device for recording play list information for defining reproduction sequence of said content information by a unit of item, which constitutes said content

information and which is accessible upon reproduction,

said button information including a plurality of button pages each of which can constitute the button menu and whose display can be changed to each other,

said button information being associated with button image information which is displayed and outputted with a background image,

said play list information including i) item information for specifying each item which constitutes said content information; and ii) sub item information for specifying said button information as a sub item,

the item information including information indicating a reproduction time of the item,

the sub item information including information indicating a reproduction time of the sub item.

10. (previously presented) The information recording apparatus according to claim 9, wherein said button information is displayed, with it superimposed on or replaced by one portion of said content information, or is not displayed at all, selectively in accordance with external designation.

11. (currently amended) An information recording method, comprising:

a first recording process of recording content

information and button information for defining a button menu which allows an operation as for said content information; and

a second recording process of recording play list information for defining reproduction sequence of said content information by a unit of item, which constitutes said content information and which is accessible upon reproduction,

said button information including a plurality of button pages each of which can constitute the button menu and whose display can be changed to each other,

said button information being associated with button image information which is displayed and outputted with a background image,

said play list information including i) item information for specifying each item which constitutes said content information; and ii) sub item information for specifying said button information as a sub item,

the item information including information indicating a reproduction time of the item,

the sub item information including information indicating a reproduction time of the sub item.

12. (currently amended) An information reproducing apparatus for reproducing an information recording medium on which there are recorded: content information; button information for defining a button menu which allows an operation as for said

content information; and play list information for defining reproduction sequence of said content information by a unit of item, which constitutes said content information and which is accessible upon reproduction, said button information including a plurality of button pages each of which can constitute the button menu and whose display can be changed to each other, said button information being associated with button image information which is displayed and outputted with a background image, said play list information including i) item information for specifying each item which constitutes said content information; and ii) sub item information for specifying said button information as a sub item, the item information including information indicating a reproduction time of the item, the sub item information including information indicating a reproduction time of the sub item,

said information reproducing apparatus comprising:

a reproducing device for reproducing said content information, said menu information and said play list information;

a generating device for generating the button menu on the basis of said button information;

a designating device for designating one button page out of the plurality of button pages; and

a controlling device for controlling said generating device to generate the button menu constructed from the designated one button page.

13. (canceled)

14. (original) The information reproducing apparatus according to claim 12, wherein

said designating device is a button in which the button command information is defined, and

said controlling device controls said reproducing device and said generating device, in accordance with the button command information.

15. (previously presented) The information reproducing apparatus according to claim 12, wherein said button information is displayed, with it superimposed on or replaced by one portion of said content information, or is not displayed at all, selectively in accordance with external designation.

16. (previously presented) The information reproducing apparatus according to claim 12, further comprising a buffer memory for storing the generated button menu.

17. (currently amended) An information reproducing method of reproducing information on an information recording medium on which there are recorded: content information; button information for defining a button menu which allows an operation as for said content information; and play list information for

defining reproduction sequence of said content information by a unit of item, which constitutes said content information and which is accessible upon reproduction, said button information including a plurality of button pages each of which can constitute the button menu and whose display can be changed to each other, said button information being associated with button image information which is displayed and outputted with a background image, said play list information including i) item information for specifying each item which constitutes said content information; and ii) sub item information for specifying said button information as a sub item, the item information including information indicating a reproduction time of the item, the sub item information including information indicating a reproduction time of the sub item,

said information reproducing method comprising:

a reproducing process of reproducing said content information, said menu information and said play list information;

a generating process of generating the button menu on the basis of said button information;

a designating process of designating one button page out of the plurality of button pages; and

a controlling process of controlling said generating process to generate the button menu constructed from the designated one button page.

25. (new) The information reproducing method according to claim 17, wherein

in said designating process, a button in which the button command information as defined is used, and

said controlling process controls said reproducing process and said generating process, in accordance with the button command information.

26. (new) The information reproducing method according to claim 17, wherein said button information is displayed, with it superimposed on or replaced by one portion of said content information, or is not displayed at all, selectively in accordance with external designation.

27. (new) The information reproducing method according to claim 17, further comprising a buffer process of storing the generated button menu.